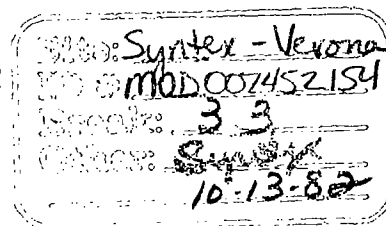


2  
SYNTEX RESEARCH  
DIVISION OF SYNTEX (USA) INC.  
3401 HILLVIEW AVENUE  
BALO ALTO, CALIF. 94304

ANALYTICAL RESEARCH

LEWIS J. THROOP, Ph.D. DIRECTOR (415) 855-5166

13 October 1982



Mr. Kenneth S. Ritchey  
Regional Dioxin Coordinator  
EPA Enforcement Division, Region VII  
324 East Eleventh Street  
Kansas City, Missouri 64106

Dear Mr. Ritchey:


Consistent with the Administrative Order of July 22, 1982, Syntex Agribusiness, Inc. ("Syntex") is hereby providing USEPA with the latest analytical results from the laboratories of Dr. Michael Gross of the University of Nebraska. These latest results supplement the information sent to you on October 4 relating to the levels of total tetrachlorodibenzo-para-dioxin ("TCDD") found in whole fish gathered from the Spring River.

It is important to note, as I did in my October 4 letter to you, that these results pertain to whole fish and not merely their edible portions. Additionally, they report levels of total TCDD and not just the 2,3,7,8-TCDD isomer. Enclosed are the new results from the August, 1982, sampling of the Spring River.

As you will note, some of the results have been verified by re-analyzing the same extract or by performing a second extraction of the sample material.

For the reasons discussed in my letter to you of October 4, these results, in our opinion, are comparable to those obtained by USEPA in March, resulting from samples collected on November 16, 1981.

Sincerely yours,

  
Lewis J. Throop, Ph.D.

fs

Enclosure

107# 116 / 7002380



40028088  
SUPERFUND RECORDS

PRELIMINARY RESULTS  
 SPRING RIVER WHOLE FISH  
 TOTAL TCDD  
 (SUPPLEMENT TO REPORT OF OCTOBER 4)

Location	Fish	Comment	Results (ppt)	Detection Limit (ppt)	Recovery Rate (%)
Station #1 (2 mi. up- stream)	Predator	First M.S. analysis	40	15	30
		Second M.S. analysis	40	15	30
	Bottom	First extraction	n.d.	6	45
		Second extraction	n.d.	13	30
Station #2 (.27 mi. down- stream)	Predator		*		
	Bottom		*		
Station #3 (5 mi. down- stream)	Predator	First M.S. analysis	35	9	30
		Second M.S. analysis	45	20	40
	Bottom		*		
Station #4 (11 mi. down- stream)	Predator		40	12	45
	Bottom		*		

\* These results were previously reported to you on October 4, 1982.

10/13/82

PRELIMINARY RESULTS  
 SPRING RIVER WHOLE FISH  
 TOTAL TCDD  
 (SUPPLEMENT TO REPORT OF OCTOBER 4)

Location	Fish	Comment	Results (ppt)	Detection Limit (ppt)	Recovery Rate (%)
Station #1 (2 mi. up- stream)	Predator	First M.S. analysis	40	15	30
		Second M.S. analysis	40	15	30
	Bottom	First extraction	n.d.	6	45
		Second extraction	n.d.	13	30
Station #2 (.27 mi. down- stream)	Predator		200	20	76
	Bottom		180	15	60
Station #3 (5 mi. down- stream)	Predator	First M.S. analysis	35	9	30
		Second M.S. analysis	45	20	40
	Bottom		20	10	45
Station #4 (11 mi. down- stream)	Predator		40	12	45
	Bottom		25	10	80

\*These results were previously reported to you on October 4, 1982.

10/13/82

# RECORD OF COMMUNICATION

☒ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE  
☐ OTHER (SPECIFY)

(Record of item checked above)

TO:

Ross Crankilton

FROM:

KSR

DATE

10/6/82

TIME

SUBJECT

Whole Fish Data

SUMMARY OF COMMUNICATION

- Bill Longton Lb - noticed
- Muscle piled up 10/5/82
- Above, 0.27, 3, 5, 11 miles  
down stream.

- Dr. P. Phillips — message left
- Linda Jones — 11
- Tom Willson — 11

CONCLUSIONS, ACTION TAKEN OR REQUIRED

- You handle this,
- Data on field sheets — Don Coleman & Phil Kery,
- From: Don Davis at the auto, Data-

INFORMATION COPIES

TO:

4 October 1982

Mr. Kenneth S. Ritchey  
Regional Dioxin Coordinator  
EPA Enforcement Division, Region VII  
324 East Eleventh Street  
Kansas City, Missouri 64106

Dear Mr. Ritchey:

Consistent with the Administrative Order of July 22, 1982, Syntex Agribusiness, Inc. ("Syntex") is hereby providing USEPA with the latest analytical results from the laboratories of Dr. Michael Gross of the University of Nebraska. These latest results relate to the levels of total tetrachlorodibenzo-para-dioxin ("TCDD") found in whole fish gathered from the Spring River.

It is important to note that these results pertain to whole fish, not merely their edible portions. As you know, the FDA advisory concerning dioxin in fish is based only upon the edible portions of the fish. Results of the edible portions of these same fish were lower, as one would expect and as we reported to you in a letter dated September 10, 1982. Incidentally, we have not yet received the results of the four samples which we reported, in that September letter, were being further analyzed.

It should also be noted that the results reported below are for total TCDD rather than just the 2,3,7,8 TCDD isomer. Again, the FDA advisory is based on the 2,3,7,8 TCDD isomer. Such an isomer-specific analysis would be expected to yield lower results.

Following, then, are the latest results of the analyses from the August 1982 sampling of the Spring River:

Mr. Kenneth S. Ritchey  
4 October 1982  
Page 2

SPRING RIVER WHOLE FISH  
TOTAL TCDD

Location	Fish	Result (ppt)	Detection Limit (ppt)	Recovery Rate (%)
Station #1 (2 mi. up- stream)	Predator Bottom	* *		
Station #2 (.27 mi. down- stream)	Predator Bottom	200 180	20 15	70 60
Station #3 (5 mi. down- stream)	Predator Bottom	* 20	10	45
Station #4 (11 mi. down- stream)	Predator Bottom	* 25	10	80

Not yet available

The above results, in our opinion, are comparable to those obtained by USEPA in March, resulting from the samples collected on November 16, 1981. In those results, whole fish total TCDD results ranged up to 120 ppt but the 2,3,7,8 isomer results for the corresponding whole fish were considerably lower and the results from edible portions of those fish were lower still. In fact, the 2,3,7,8 results from that sampling of the edible portions of the fish were below the levels where the FDA advisory would recommend any modification of fish consumption.

If you have any questions concerning these results, please do not hesitate to call me.

Sincerely yours,

*Lewis J. Throop* by *L. E.*  
Lewis J. Throop, Ph.D.

PRELIMINARY RESULTS  
 SPRING RIVER WHOLE FISH  
 TOTAL TCDD  
 (SUPPLEMENT TO REPORT OF OCTOBER 4)

Location	Fish	Comment	Results (ppt)	Detection Limit (ppt)	Recovery Rate (%)
Station #1 (2 mi. up- stream)	Predator	First M.S. analysis	40	15	30
		Second M.S. analysis	40	15	30
	Bottom	First extraction	n.d.	6	45
		Second extraction	n.d.	13	30
Station #2 (.27 mi. down- stream)	Predator		200	20	70
	Bottom		180	15	60
Station #3 (5 mi. down- stream)	Predator	First M.S. analysis	35	9	30
		Second M.S. analysis	45	20	40
	Bottom		20	10	45
Station #4 (11 mi. down- stream)	Predator		40	12	45
	Bottom		25	10	80

\* These results were previously reported to you on October 4, 1982.

10/13/82

PRELIMINARY RESULTS  
 SPRING RIVER WHOLE FISH  
 TOTAL TCDD  
 (SUPPLEMENT TO REPORT OF OCTOBER 4)

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Station #4 (11 mi. down- stream)	Predator		40	12	45
	Bottom		25	10	80

\* These results were previously reported to you on October 4, 1982.

10/13/82





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BILL OF LADING NO.

**3958274**

DATE <b>1 / 11 / 83</b>	PICKUP AGENT <b>100</b>	JOB NO. <b>3513-57</b>
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**SHIPPING INFORMATION**

FROM (SHIPPER) <b>SYNTEX CORP</b>		SCN NO. <b>4945</b>
PICKUP ADDRESS <b>3401 HILLVIEW AVE</b>		ROOM NO.
<b>PALO ALTO</b>		PHONE NO. <b>94304</b>
<b>Letter</b>		
DESCRIPTION OF SHIPMENT		
NO. PIECES <b>1</b>	WEIGHT <b>30 g</b>	DECLARED VALUE (NOT OVER \$500) <b>NCV</b>
SHIPPER'S SIGNATURE <i>[Signature]</i>		

**DOMESTIC BILL OF LADING**

**DELIVERY INFORMATION**

TO (CONSIGNEE) <b>MR. WILLIAM SPRATLIN</b>	
DELIVERY ADDRESS <b>AIR AND WASTE MANAGEMENT DIVISION</b>	ROOM NO.
<b>U.S. ENVIRONMENTAL PROTECTION AGENCY REGION VII</b>	
<b>324 EAST ELEVENTH STREET</b>	
<b>KANSAS CITY, MISSOURI 64106</b>	
CONSIGNEE SIGNATURE (RECEIVED IN GOOD ORDER)	

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495-0635**

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